

Notice of Allowability

Application No.

10/796,375

Examiner

Mike Qi

Applicant(s)

KIM ET AL.

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/20/05.
2. ☒ The allowed claim(s) is/are 1-8, 10, 11, 13-17 and 19-38.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jon Y. Ikegami on May 10, 2006.

The application has been amended as follows:

- 1) The claim 12 has been canceled.
- 2) The claim 1, in line 4, after "a transparent electrode"; **insert - -** and a transparent common electrode; - -; in line 5, after ". . . between the substrate and the transparent . . ." **insert - -** common - -; in line 12, after ". . . with the transparent electrode" **insert - -**; and signal line forms a border with the reflective region, the transmissive region, and the interface region, wherein the interface electrode is located at the border. - -.
- 3) The claim 17, in line 13, after "electrode;" **insert - -** and signal line forms a border with the reflective region, the transmissive region, and the interface region, wherein the interface electrode is located at the border. - -.
- 4) The claim 22, in line 7, after ". . . to form an interface electrode;" **insert - -** and signal line forms a border with the reflective region, the transmissive region, and the interface region, wherein the interface electrode is located at the border. - -.

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5) The claim 26, in line 7, after "... to form an interface electrode;" **insert**
- - and signal line forms a border with the reflective region, the transmissive
region, and the interface region, wherein the interface electrode is located at the
border. - -.

Allowable Subject Matter

1. Claims 1-8,10-11,13-17,19-38 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art of record neither anticipated nor rendered obvious that a display apparatus comprising various elements as claimed, more specifically, as the following features:

The data signal line forms a border with the reflective region, the transmissive region and the interface region, and the interface electrode is located at the border of the reflective region, the transmissive region and the interface region, such that the interface electrode is shaped and positioned to prevent light leakage in the interface region as shown in Fig.3-4 [claims 1, 17, 22 and 26].

The references such as Kubo, Sakiguchi and Okumura disclose a liquid crystal display apparatus having reflective region, transmissive region and coupling area and the drain electrode can be extended to the pixel region (such as reference Sekiguchi) so as to simplify the manufacturing process. However, the prior art of record do not disclose such interface electrode wherein the data signal line forms a border with the reflective region, the transmissive region and the interface region, and the interface electrode is located at the border of the reflective region, the transmissive region and the interface region, such that the interface electrode is shaped and positioned to prevent light leakage in the interface region as shown in Fig.3-4.

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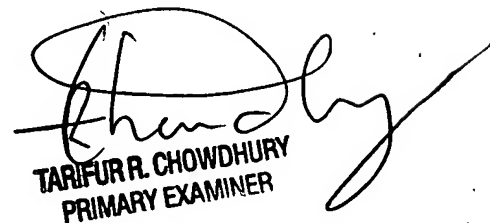
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299. The examiner can normally be reached on M-T 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi
May 11, 2006


TARIFUR R. CHOWDHURY
PRIMARY EXAMINER